Report on a Study of Cultural Competence Teaching in California Medical and Dental Schools

Leslie Wilson, Ph.D.
Associate Adjunct Professor
Health Policy and Economics
University of California, San Francisco
Tel: 415-502-5092
lwilson@itsa.ucsf.edu

Shawn Houghtaling, Pharm.D.
UCSF
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Executive Summary:

The U.S. Population is becoming more ethnically and culturally diverse. In 1995 Linguistic and cultural minority populations constituted 26.5% and by 2010, estimated to be 32%, of the U.S population. Seventy Seven % of patients are members of ethnic groups and 62% of patients do not speak English.[1-4]. There is much evidence that access to appropriate care for the ethnically and culturally diverse population of California could be improved [1, 5-9]. There are many reasons for decreased access including shortages of culturally and linguistically trained physicians practicing in appropriate areas, differences in health care seeking patterns when communication barriers exist and when poverty is an issue and economic issues of both patients and practicing clinicians.

There are many potential solutions to this issue including increasing manpower of culturally and linguistically competent physicians, increasing incentives to practice in shortage areas, and increasing knowledge about and commitment to this population and their health needs.

The California legislature is addressing this problem with a current Assembly Bill (AB) 2394 (Firebaugh, Chapter 802, Statutes of 2000), which also created the subcommittee of the Task Force on Culturally and Liguistically competent Physicians and Dentists

(subcommittee)[1]. AB 2394 charged the subcommittee with examining the feasibility of establishing a pilot program to allow Mexican and Caribbean licensed physicians and dentists to practice in nonprofit community health centers in California's medically underserved areas.[10]

The purpose of this study, that is being conducted for this task force, is to determine what California medical and dental schools are currently doing to prepare culturally and linguistically competent practitioners. More specifically this study asks the question, What courses and experiences directed toward teaching about cultural and linguistic competence are provided by California medical and dental schools and what is the content of these courses?

Most previous research in this area has only looked at medical schools, and then only at the percentage of schools offering cultural training and the number of specific didactic courses (elective and non-elective) offered. For example, California's annual survey of Medical Schools (2000-2001) asked where cultural diversity was taught and 100% said as part of a required course, 50% responded as a separate elective course and 62% said as part of an elective course (Sylvia Etzel, personal communication, LCME Part II, Oct. 10, 2001). This gives very little information on the extent of this teaching and the numbers of students taking these courses. Our study expands existing efforts by looking at both medical and dental schools, at both didactic courses and clinical experiences, and at both the number and teaching content of these courses.

Methods: Eight medical schools and 5 dental schools were surveyed. All deans and department chairs were mailed a survey asking what cultural competence courses were taught and who taught them, as well as to identify others who might know additional courses or teachers. We asked for any type of teaching, both within the school and in the community, both elective and non elective, credit or non-credit experiences, as well as clinical experiences which contained content related to cultural awareness. Those identified as teachers of these courses were then sent a survey asking about the hours of content and type of content of the course for teaching cultural competence (see online survey in appendix A). The survey was based on the factor analysis of items on the Transcultural Self-efficacy Tool (TSET), [11]. Learning outcomes were organized into Cognitive, Practical, and Affective main subclasses of knowledge and skills relating to cultural competence learning. This survey was scored from 0-4 with a sum and average total score for the 2 main subscales and 11 item subscales within these 3 main subclasses (see Figure 1 for description of subscales). The average survey score was used to weight each courses hours to reflect the extent of cultural competence content. For example an average survey score of 0 for a 100 hour course would have a 0 weighted hours and with a score of 4 would have a 100 hours attributed to teaching cultural competence.

Results: The major results are listed below:

1. **Today's medical schools and some dental schools can be categorized into having one of three types of curricula:**
    a. Traditional Curricula which offer didactic courses focusing on basic sciences in the first two years and clinical experiences in the last 2 years:
        i. Loma Linda University (medical and dental)
        ii. UC Davis
    b. Traditional Curricula with integrating courses such as Doctoring 1 or IDS, or CABS, or Patient-Doctor I etc.
        i. UCLA
        ii. Stanford
        iii. UCSD
        iv. UCI
    c. Fully integrated Curricula:
        i. UCSF
        ii. USC (medical and dental)
2. **Hours of cultural competence teaching: The summed and weighted student hours per enrolled student were calculated for both medical and dental schools and showed a relative large number of weighted hours for both medical (403 hours per student) and dental schools (199 hours per student). (see presentation in Appendix for more study results)**
    a. **Medical Schools:**
        i. 81 medical school courses and 9,700 summed hours of courses had some aspect of cultural competence in them
        ii. **Medical schools have on average, 403 weighted student hours per enrolled student**
        iii. 84% of students take these courses on average
        iv. 72% were required
        v. 26% had cultural competence as a main goal
        vi. 18% of the courses weighted hours were clinic experiences
        vii. 29% of weighted hours were primarily lecture courses
        viii. 24% of the weighted hours were both required and the main goal
        ix. A typical lecture course with cultural competence as the main goal of the course had 5 weighted student hours per student
        x. A typical Doctoring course had 60 (35-110) weighted hours of cultural teaching
        xi. A typical integrated curriculum block course had 40 (28-110) weighted hours of cultural teaching
        xii. A typical clinical course had 80 (50-170) weighted hours of cultural teaching.

b. Dental Schools:

i. 48 courses and 3,191 summed hours of dental school courses containing some aspect of cultural competence were surveyed

ii. Dental schools have on average, 199 weighted student hours/enrolled student.

3. **Type of cultural competence teaching: The schools had a full range of cultural items taught, but mainly were of an Affective learning type which focuses on attitudes, appreciation and awareness of self and cultural gaps and diversity. (see item description in Figure 1 and survey online questions in Appendix A)**

a. Medical Schools:

i. 2.44 is the overall course impact score (0-4 scale)

ii. 1.8 is the average score

iii. The cultural competence teaching was mainly in the area of Affective learning and least in the cognitive learning subscale

b. Dental Schools:

i. 2.26 is the overall course impact score (0-4 scale)

ii. 1.3 is the average intensity score

iii. The cultural competence teaching was mainly in the area of Affective learning and least in the cognitive learning main subscale just as were the medical schools although they had lower average scores in each subscale.

iv. Recognizing the meaning of pain was scored only as 1.33, a low score for such an important category of dental care.

Conclusions and Recommendations: The following are a list of the conclusions and recommendations based on the results of this study

1. There are a large number of hours of experience in Medical (and to a lesser degree in dental schools) teaching cultural competence
2. Public medical schools report more hours than do private medical schools, but this may also be due in part to poorer responses from private schools to this survey
4. Medical schools (and a few dental schools) are integrating cultural competence into the curriculum as they also move towards a more integrated curriculum
5. Teaching cultural competence is moving away from the method of teaching differences by each ethnic group towards a more modern method of teaching about individual differences among all types of patients [5, 12, 13]. This requires a new method of measuring cultural competence teaching and one, such as ours, which includes measures of learning during clinical experiences.
6. Cultural competence training is enhanced by clinic experiences provided in an ethnically diverse community
7. Most faculty responders report that both students and faculty see importance of cultural competence to providing good quality patient care

8. The cultural competence teaching focuses mainly on affective self-awareness (2.1) and could expand to more depth and more practical skills (1.3) to provide a more complete learning experience.
9. More focus could be put on linguistic competence (1.74)
10. Medical school faculty publish in this area: for example: S. McPhee, UCSF, JAMA, 2002. 287:495-504 Caring for a 70-year old Vietnamese woman.[6] Some medical school clinic programs have been featured in Newsweek or other publications to highlight their emphasis on diversity care.
11. Some medical school faculty expressed specific additional concerns about patient access to care, especially in inner city Los Angeles.
12. California medical schools (especially UC's) have a diverse faculty and are located in ethnically diverse communities. It appears that faculty, student diversity and community diversity play a role in encouraging teaching in this area. Only 1 respondent indicated that there was no time for teaching cultural competence.
13. Most UC's have excellent departments teaching wonderful courses in all aspects of cultural awareness. However, most medical students don't have time to take these as separate courses. Those with integrated curricula no longer include these as separate course but ask social science faculty to teach the content within an integrated block. Behavioral Science/Anthropology faculty have voiced concern that there is not enough cultural teaching in the newly integrated curriculums.
14. During the change-over to integrated curriculums, there is a risk that cultural competence will not be included but this content may be added later as schools evaluate the new content fully.

In conclusion, medical and dental schools have a large number of hours spent on teaching of cultural competence, when measured to include both didactic and clinical and group courses. The content of the cultural competence teaching is quite variable and complete, but more depth should be emphasized, especially in the practical area of content. The current ethnic diversity of faculty, students, and the community clinic experiences seem to contribute to the teaching of cultural competence in these schools. As the curriculums change over time, vigilance is need to ensure that there is continued teaching in cultural competence and that current talent in this area at the universities is used to enrich the medical and dental school curriculum.

Full Report:

Introduction/Purpose:

The U.S. Population is becoming more ethnically and culturally diverse. In 1995 Linguistic and cultural minority populations constituted 26.5% and by 2010 estimated to be 32%, of the U.S population. Seventy Seven % of patients are members of ethnic groups and 62% of patients do not speak English [1 2, 3].

The Council on Graduate Medical Education 12th report on minorities in medicine published in May, 1998, states that physicians will take care of increasingly diverse populations. [4]

Concern about cultural awareness in health care has become increasingly recognized as important to being able to provide adequate health care in today's environment which includes patients from many different socio-cultural backgrounds [5 14]. Patients acceptance and use of medical advice is dependent on their understanding and communication with their physician or other medical provider. Physicians, pharmacists and dentists recommendations and explanations about care and use of drugs might vary depending on a patient's socio-cultural differences and unique ways of understanding illness and health care.

The Liaison Committee on medical education standards, revised in Nov. 2000, maintains that medical school "faculty and students must demonstrate an understanding of the manner in which people of diverse cultures and belief systems perceive health and illness and respond to various symptoms, diseases, and treatments. Medical students should learn to recognize and appropriately address gender and cultural biases in health care delivery, while considering first the health of the patient".

There is much evidence that access to appropriate care for the ethnically and culturally diverse population of California could be improved [1 5-8]. There are many reasons for decreased access to health care including shortages of culturally and linguistically trained physicians practicing in appropriate areas, differences in health care seeking patterns when communication barriers exist and when poverty is an issue, and economic issues of both patients and practicing clinicians.

There are many potential solutions to this issue including increasing manpower of culturally and linguistically competent physicians, increasing incentives to practice in shortage areas, and increasing knowledge about and commitment to this population and their health needs.

Both the problems of access for minority and ethnic groups and increasing needs for culturally competent health care providers has led to the need to examine the cultural

skills of our health care providers as well as the emphasis in the clinical curriculum to teach and develop cultural awareness and competency.

The California legislature is addressing this problem of ensuring access to culturally sensitive health care in California, with a current Assembly Bill (AB) 2394 (Firebaugh, Chapter 802, Statutes of 2000)[1], which also created the subcommittee of the Task Force on Culturally and Liguistically competent Physicians and Dentists (subcommittee). AB 2394 charged the subcommittee with examining the feasibility of establishing a pilot program to allow Mexican and Caribbean licensed physicians and dentists to practice in nonprofit community health centers in California's medically underserved areas. [10]

The committee has the mandate to examine both the diversity of our health care practitioners and their ability to give socioculturally sensitive care to minority and ethnic groups in California. One method to examining this ability is to look at what is being taught in medical and dental schools, to encourage sociocultural sensitivity and competence in the provision of health care.

The goal of this research is to describe the extent and type of cross-cultural teaching in California health care curriculums today. More specifically this study asks the question, What courses and experiences directed toward teaching about cultural and linguistic competence are provided by California medical and dental schools and what is the content of these courses?

Background:

Most previous research in this area has only looked at medical schools, and then only at the percentage of schools offering cultural training and the number of specific didactic courses (elective and non-elective) offered. For example, California's annual survey of Medical Schools (2000-2001) asked where cultural diversity was taught and 100% said as part of a required course, 50% responded as a separate elective course and 62% said as part of an elective course (Sylvia Etzel, personal communication, LCME Part II, Oct. 10, 2001). This gives very little information on the extent of this teaching and the numbers of students taking these courses. Our study expands existing efforts by looking at both medical and dental schools, at both didactic courses and clinical experiences, and at both the number and teaching content of these courses.

There are only about four main studies of extent of cultural competence teaching in the literature. An early study [7] described that of the 78% of medical schools responding to the survey, only 20% offered formal sociocultural courses, and 40% offered some aspect of sensitivity training in other courses. 40% of medical schools offered no cultural competency experiences at all.

A 1986 study of British Medical Schools found that 33% of responding medical schools had specific lectures in their main curriculum (3 hours) of which 22% had additional optional lectures. In all, 58% had compulsory or optional formal cultural teaching [15].

A study using the 1991-2 survey of US medical schools demonstrated that only 13% of responding schools offered cultural sensitivity courses to their students, and all but 1 of the 13 courses was optional. Despite this low level, only 34% of schools were planning to implement new courses [8].

In California's annual survey of Medical schools (LCME Part II, 2000-2001, personal communication Sylvia Etzel , Oct 10, 2001). Medical schools were asked where in the curriculum instruction in cultural diversity was taught.
1. 100% stated that they had cultural diversity taught as part of a required course
2. 50% as a separate elective course
3. 62% as part of an elective course

The American Medical Student Association, as part of the PRIME program (Promoting reinforcing, and improving medical education) initiative has developed a Culture and Diversity curriculum and is funding medical schools to implement this curriculm [16].

These studies generally indicate the need for more sociocultural training, although it seems to be improving with time. While this information is valuable and indicates roughly the efforts being made by professional schools, sociocultural training takes part in non-formal settings, group discussions and clinical experiences as well, and these are not recorded.

In addition, the types of sociocultural curriculum content have not been described on a broad basis, and therefore there could be much variation in the actual extent of teaching in this area. In addition, there is very little information on cross-cultural teaching in dental schools found in the literature.

"Implementation of cross cultural health care has generally focused around structural changes such as the development of bilingual health care providers, more availability and use of interpreters, and provision of educational materials in several languages" [5]. There have also been advances in the efforts to train practitioners in the care of patients of diverse socio-cultural backgrounds. Most of these efforts have focused first on cultural sensitivity which is only the first step towards a competency [17]. In addition, this training often focuses on identifying specific groups of individuals and factors "characteristic" of their culture as a group, and teaching those differences in customs an beliefs, ignoring individual differences related to other factors in the individuals life. This method tends to stereotype a culture, which can lead to further cultural insensitivities [18]. "A newer model for training and education of health care providers is one that provides a patient based cross-cultural curriculum based on a set of concepts and skills based on themes that relate across cultures. This approach begins with a focus on the attitudes that are necessary for a successful cross-cultural encounter: empathy, curiosity, and respect and including

explorations of the patients meaning of illness and negotiating management options across different cultures" [5] Brach et al [9] from the Agency for Healthcare Research and Quality have developed a conceptual mode consisting of 9 major techniques: interpreter services, recruitment and retention policies, training, coordinating with traditional healers, use of community health workers, culturally competent health promotion, including family and community members, immersion into another culture, and administrative and organizational accommodations, to reduce racial and ethnic health disparities with more attention on cultural sensitive care delivery. They conclude that training of health care workers should include enhancing self-awareness of attitudes towards minorities populations, and increasing knowledge and improving specific skills. [9] [19]

Our study seeks to expand on the existing research conducted to determine the adequacy of cross-cultural awareness being taught in medical schools using current models of training methods. In addition we will expand existing data to look at cross-cultural training being conducted in pharmacy and dental schools for the first time.

Methods:

This is a descriptive cross sectional e-mail survey of all 8 medical, and all 5 dental schools in California. We first surveyed deans, course coordinators and teachers in these schools to determine the format, content and timing of courses on cultural issues. In addition we asked course teachers for details about which aspects of cultural competence are covered in the curriculum. We followed the following procedures:

1. Identified all dental and medical schools.
2. Mailed out a preliminary questionnaire to all department chairs, school deans and heads of student affairs office asking for a list of persons who are best suited to provide a list of all types of courses, clinical experiences or workshops that expose students to cultural and linguistic competencies as well as a list of courses that their institution provides to expose students to cultural and linguistic competencies and who teaches or co-ordinates them.
3. For all faculty provided in response to the preliminary questionnaire, we sent out an additional preliminary questionnaire asking them to also provide a list of all types of courses, clinical experiences or workshops that expose students to cultural and linguistic competencies as well as a list of courses that their institution provides to expose students to cultural and linguistic competencies and who teaches or co-ordinates them.
4. For all faculty listed as teachers or coordinators of courses involved with cultural competence on these two preliminary questionnaires, we emailed them an online survey requesting details about the extent of teaching of cultural competence within that course (see Appendix for copy of the on-line survey). The survey results were confidential.
5. The preliminary questionnaire was resent two more times by email if not responding and the course survey was also sent two to 5 more times by email if not responding.

6. Faculty at some schools answered the preliminary questionnaire as a group, or several responded together. Often the questionnaire was referred directly to another faculty person for a response.
7. We also looked at each curriculum on the Schools web site and selected courses that we thought might have cultural content and sent additional surveys to faculty teaching these courses.
8. Finally, a telephone call was made to a major contact person knowledgeable about the curriculum and cultural competence within that curriculum to verify that we had complete information.

Course Survey: For every course that was selected by deans and department chairs as having content in cultural or linguistic awareness, we emailed a course survey to the coordinator or teacher of these courses. This survey was based on the Factor analysis of items on the Transcultural Self-efficacy Tool (TSET) [11].

We reformulated the questions from their analysis within their themes to ask about the educational content of courses and the extent that each course was able to educate a culturally competent clinician. We pilot tested this questionnaire on several faculty at UCSF, who both were experts in cultural competency education in medical schools to see if our content was accurate, and to those who had no experience with cultural competence but taught courses which might have this content to see if they could understand the nature of the questions. We made some changes in wording in response to this pilot.

Learning outcomes were organized into cognitive, practical, and affective main subclasses or distinct themes of knowledge and skills relating to cultural competence learning and 11 item subscales. (see Figure 1 for an explanation of survey item subscales). .

Scoring: Responses are scored on a scale of 0-4 on the extent that a particular course provides competency in a particular aspect of cultural or linguistic education. The scoring is a simple averaging of the series of questions under each distinct theme. There is also an overall average score for each course as well as a final question that ask the respondent to provide an overall score for his or her course.

Because each course is taken by a different number of students and represents a different number of units or hours of content, these scores were also used to weight the number of course hours depending on the intensity of cultural competency in the course. The total sum of course hours that are spent teaching a course that contains cultural competence was multiplied by the average score weight (average score/4) to arrive at a weighted sum score. For example an average survey score of 0 for a 100 hour course would have a 0 weighted hours and with a score of 4 would have a 100 hours attributed to teaching cultural competence. This weighted sum of hours was multiplied by the number of students enrolled in each course and then this number was divided by the students enrolled in each class to arrive at a weighted number of cultural competency course hours taken per student enrolled.

Steps in weighting survey:
1. We weighted total summed course hours by the extent of cultural competence teaching using the survey score
–Score = 0, then hours*0 = weighted hours
–Score = 1, then hours*25% = wted hours
–Score = 2, then hours*50% = wted hours
–Score = 3, then hours*75% = wted hours
–Score = 4, then hours*100% = wted hours
2. We also accounted for the number of students taking the course hours (ie for elective courses)
3.We then determined the weighted student hours being taken on average by each student enrolled in school = *Weighted Student Hours per Enrolled Student*

This scoring system was necessary because, for example, the integrated courses, have a small amount of cultural competence content over the whole course and a large number of hours. Therefore they will have a lower content score but for a longer number of hours than a specific course on cultural competence which will have a higher score but for a fewer number of student hours. In addition, elective courses will have a fewer number of students taking them and this will be reflected in this weighted hours per enrolled student as well.

Results:

Medical Schools:

Extent and type of cultural competence teaching: 81 medical school courses and 9,700 summed hours of courses from the 8 California medical schools had some aspect of cultural competence in them. An average of 84% of the class takes these courses. 72% of the courses were required and 26% of the courses had cultural competence as the main goal of the course. 32% of the courses had lecture as the predominant teaching approach, while 31% of the courses had clinic and group discussion as the predominant teaching approach.

Medical schools have on average 403 weighted student hours per enrolled student, meaning that each student on average has 403 hours of concentrated cultural competence content during their 4 years of medical school. To put this into perspective a 4 unit lecture course is about 40 hours and a 6 unit lab or clinic course is about 216 hours. Public schools had an average of 521 weighted hours per enrolled student while private schools had 208 weighted hours.

The majority of the weighted hours were for required courses, but the majority of the hours were also not the main goal of the courses (see Figure 2). 101 weighted hours were both required and the main goal of the course. 29% of the weighted hours of cultural competence were for courses where lectures were 50% or more of the total type of teaching in that course. Courses where clinic experiences were 50% or more of the teaching, accounted for only 18% of the weighted hours. Courses where group discussions predominated, accounted for only 7% of the weighted hours of cultural competence teaching.

Typical course responses: To get a further idea about the type of courses that contain cultural content, we looked at the weighted hours per enrolled student for certain typical courses. For example, a typical lecture course with cultural competence as the main goal had an average of 5 weighted student hours per enrolled student, and a typical "Doctoring " type course had 60 weighted hours (35-110). A typical integrated curriculum block course had an average of 40 (28-110) weighted hours and a typical clinical course had 80 (50-170) weighted hours.

Content of cultural competence teaching: Medical school cultural competence courses were rated with an overall impact score of 2.44 on a scale of 0-4. The average score of all the question items yielded a score of only 1.8 indicating that even with a low level of specific content in each course, the impact teachers thought it was making on the students was relatively high.

Most of the course content was in the affective subscale with an average score of 2.1 with less content in the practical, and much less in the cognitive subscales (1.36) (see Figure 3). The affective subscale focuses on attitudes, appreciation of cultural diversity and roles, self-awareness of ones own beliefs and biases, awareness of a cultural gap and potential prejudices and discomforts [11]. These are the earlier forms of the progress towards cultural competence and probably are taught or experienced earlier than the cognitive attributes which focuses on knowledge, comprehension, synthesis and evaluation of professional care and life cycle transitions. Although the scores demonstrate that the extent of cultural teaching in each area for the entire course is low, there seem to be sufficient total number of weighted hours of course content, and in addition teaching addresses all of the subscale areas. Figure 4 shows the areas of teaching within the three subscales, with the highest content score attributable to the affective subscale of recognition, indicating the courses teaches how to recognize among different cultures, the impact of select elements on health care practices and the need to foster cultural care, and prevent ethnocentric views [11] as well as awareness of the cultural gap including discomforts, insensitivities and prejudices. The teaching of life cycle transitions was scored lowest, perhaps indicating that the cultural teaching has moved from that of how each ethnic group responds to issues of human development or health to the teaching that gives attention to the needs of each individual with all their individual characteristics together with their effect on their health and the health care system.

Dental Schools:
We surveyed all dental schools in California; 2 public and 3 private schools. We surveyed 48 courses and 3,191 summed hours of course teaching which included any aspect of cultural competence teaching. Dental schools had less cultural content than did medical schools with 199 weighted student hours per enrolled student. Dental schools had similar scores on the cultural content in the courses as did medical schools. They had an overall course impact score of 2.26 and an average intensity score or 1.3. In addition, dental schools scored similarly to medical schools on the content as indicated by the main subscale scores, with most of the teaching in the affective content area and the least in the cognitive area (Figure 3). Dental schools focused more on models/definitions and sensitivities to biases and gaps and not as much on professional care, identity, or life transitions as did medical schools. Recognizing pain meaning received only a score of 1.33 which is perhaps low for dental schools, which often focus on the issue of pain and the meaning of pain to a particular patient.

California Universities: California Universities that educate medical and dental students, have a very ethnically and culturally diverse faculty, as well as student body, especially in the state system. Faculty responded about the importance they saw in instilling in students sensitivity towards differences, both culturally and economically. Many faculty were motivated by their own experiences in caring for patients, and in their own experiences as part of an ethnic group. In addition, these universities often have many experts both within the professional schools and as part of the larger faculty in the field of cultural anthropology, behavioral sciences emphasizing culturally competent medical care, and have published books and papers in this area. In addition, many relevant courses are offered at these universities within many departments that could provide important content for medical students. Therefore it is clear that the expertise exists within California Universities to provide this education to students. However, it is also true that the content needed in professional schools today is more than previously, and it is often difficult to provide the time for these students to gain these experiences, and take these relevant courses. We did have a few responses to our surveys that said that their priority was to educate clinically competent physicians first and then to focus on these other factors. However, most respondents recognize the essentialness of providing good medical treatment, of treating all patients as distinct individuals with their own important beliefs and behaviors, and the necessity of becoming culturally competent.

Medical Schools: There are 8 medical schools in California, 5 public medical schools, and 3 private medical schools. The responses were much more complete from the public schools than the private schools. All of the medical schools emphasize behavioral aspects of medicine as an important factor in educating physicians, especially in today's health care systems with today's varied populations. In addition, all medical schools have rotations to clinics caring for ethnically and culturally diverse populations and also the underserved. Many of these are student run clinics, demonstrating the importance that the student him or herself identifies in providing care to all groups. These types of clinical experiences are one of the major ways that students are educated in methods of

working with ethnically diverse populations. Most schools provide opportunities to discuss their clinical experiences in small groups, as well, and these discussions can provide the important discussion necessary to learn how to approach different types of patients as individuals. In addition several schools have developed model programs that provide experiences in providing culturally competent care to disadvantaged, underserved, or ethnically diverse communities.

Many medical schools are in a process of transition in their curriculums which mostly involved changing from a traditional didactic curriculum focusing on the basic sciences in the first two years and clinical experiences in the last two years, to a more integrated curriculum, combining clinical and scientific content throughout all 4 years. Many schools retained the traditional curriculum, but had major integrating courses that served the purpose of integrating science content with clinical practice. This transitioning to more integration of the curriculum has an important implication for the study of cultural competence within medical schools. In the non-integrated curriculums, it was fairly easy to identify specific courses within the curriculum that focus on cultural issues and to measure this content with units or hours taught. However, within an integrated curriculum, when for example, the cardiovascular system is taught, there will be presentation of physiology, with clinical case instruction, including some lectures, perhaps on cultural issues, or discussion of cultural issues within the patient case instruction. This type of content is much more difficult to quantify.

Therefore, because of these transitions, and variation in type of curriculum, it was somewhat more difficult to clearly identify the extent of cultural competency within medical and to a lesser degree, dental school curriculums. However, our approach was to have faculty rate the entire "Blocks" of the integrated curriculums, for specific content with our survey, knowing that it will be a small part of the overall course but also within the course at some level. Then we used the survey to weight the hours to reflect only the true cultural competence teaching. In this way, we feel we were able to capture the cultural content of these courses, despite all their hours not being directed primarily to cultural issues.

Some respondents expressed concern that the integrated curriculum was not including enough of this content, and that the usual separate cultural courses were no longer part of the curriculum. Others expressed that the integrated curriculum provided more opportunity for students to discuss and have experience with cultural issues with patients first-hand. It is probably the case that during the transition to integrated curriculum's there will be some "growing pains" in providing all the previous content areas, and changes will have to be made to include important content neglected, in subsequent years. At least one dental school is currently in the process of cataloguing all the content in their new integrated curriculum, and say that they will be better able to identify particular skills such as cultural competence skills, when this mapping is complete.

The curriculum of each school is discussed briefly in appendix A.

Dental Schools: There are 5 dental schools in California, 2 public schools and 3 private schools. All of these schools emphasize the importance of communication with dental patients, especially around patient management, prevention, dealing with issues of pain, and with care of special populations. Most schools emphasize their commitment to the care of people in the community as demonstrated through educational clinics and experiences with providing dental care to these often underserved and minority communities. In addition, most of these schools share some of the resources of the medical schools, for teaching resources and have access to multiple classes that provide education in cultural awareness. Dental programs, just like medical school curriculums, however, are fully packed with required courses and so the extent that students take these courses is often up to the individual interests of each student in choosing the few electives that they have room for.

Only USC has an integrated curriculum, and this program is just beginning in Fall of 2002. Two other programs have a traditional curriculum with integrating courses; UCLA with their focus on a vertical team framework with one student from each year working together in the treatment and management of patients in a practice over 4 years, is an example of this and this experience can provide a wealth of experience working with various ethnic and cultural groups. The other two programs have a more traditional approach of separate basic science and behavioral science courses in the first 2 years followed by a heavier clinical emphasis in the last 2 years. These schools provide separate courses in patient communication and management for example, which can include aspects of cultural and linguistic awareness.

Limitations: Our goal was to be as broad as possible in including course content in our survey and therefore we questioned each dean and department chair about possible course content, clinical experience, and other experiences that provide culturally competent doctors, dentists, and pharmacists. Although we did several mail and email mailings, we received only about a third of the responses from these mailings. However, most of these respondents referred our survey on to others in the department or got together with others to provide group responses. Therefore we felt in most cases that we got a thorough listing of relevant courses. However to ensure, that we did get a complete list, we also reviewed the web pages for listing of relevant courses, and had individual discussions with each Dean or assistant dean of student affairs to verify that we had all relevant courses. Appendix B provides a short description of each dental school and selective courses that provide content in cultural and linguistic awareness.

Our response rate to the individual course surveys were also difficult to obtain and required up to 3 different emailings and multiple individual correspondence as well. Because there are multiple teachers in a single course in the integrated curriculums courses, often one course coordinator had to answer up to 9 surveys and was willing to do so. In addition, individual faculty who taught most of the content that includes cultural and linguistic awareness also had to fill out multiple surveys. We felt that we had a

response to almost every major course that has this content, however, we did not have responses to every single clinical experience and elective course that might have had some content. Therefore, our analysis should be viewed as providing the an assessment of the major content of cultural education within these schools, but is by no means a complete look at every content of every experience that a student has. Therefore students probably have even more experiences than is reflected by our analysis.

Discussion

Most previous studies look at just required or non-required courses specifically teaching cultural competence. They report that only 20% of us medical schools had formal courses and 40% offered no cultural competency experiences at all.[7] We look at both required and not required and both lecture courses and clinical and group discussion courses for the first time. This type of analysis allows us to reflect the new developments in curriculum changes towards more integrated courses which would include cultural competence in many aspects of a section on, for example cardiology.

There seems to be a large number of hours of experiences teaching cultural competence in medical and to a lesser extent in dental schools. (403/student and 199/student). Public medical schools report more hours than do private medical schools although this could also reflect the greater difficulty in getting responses from private schools as well. Medical schools are integrating cultural competence into the curriculum as they also move towards a more integrated curriculum. At the same time the teaching of cultural competence has moved away from the method of teaching differences by ethnic group towards a more modern method of teaching about individual differences among all types of individuals.

In addition, we found that cultural competence training is enhanced by clinic experiences provided in an ethnically diverse community. Both students and faculty reported seeing the importance of cultural competence to providing good quality patient care. Most faculty described that their interest in teaching cultural competence stemmed either from their own culture and ethnicity or specific experience with other cultures that they had in there life. Many faculty described additional expertise in anthropology or sociology as a background for their interests. Faculty also frequently expressed that students were often the ones that asked to have or started programs to provide care to the culturally and ethnically diverse and underserved.

In terms of the type of teaching content, the focus is mainly on affective self-awareness (2.1) and could expand to more depth and more practical skills (1.3) to provide a more complete learning experience. However, the survey responses also showed that all content areas were covered to at least some degree. More focus could also be put on linguistic competence which received only a score of 1.74 for medical school courses.

In conclusion, medical and dental schools have a large number of hours spent on teaching of cultural competence, when measured to include both didactic and clinical and group

courses. The content of the cultural competence teaching is quite variable and complete, but more depth should be emphasized, especially in the practical area of content. The current ethnic diversity of faculty, students, and the community clinic experiences seem to contribute to the teaching of cultural competence in these schools. As the curriculums change over time, vigilance is need to ensure that there is continued teaching in cultural competence and that current talent in this area at the universities is used to enrich the medical and dental school curriculum.

Figure 1:

Main Subscales with their respective item subscales:

I. Cognitive Subscale: focuses on knowledge, comprehension, synthesis and evaluation

A. Professional care item: Clinical roles, responsibilities, and practice: Specifically illness prevention, health maintenance, health restoration, health promotion, safety, exercise & activity, pain relief and comfort, and physical examination

B. Life Cycle Transitions item: Issues of human development: Death and dying, sexuality, life support, aging, growth and development, birth and pregnancy

II. Practical subscale: Focuses on motor skills or practical application of skills, interviewing and learning about values and beliefs

A. Kinship and Social Factors: traditions, roles and life experiences related to individuals culture

B. Cultural Background and Identity: acculturation, world view, technological views, religious practices & beliefs

C. Communication: verbal & nonverbal communication, space & touch, time perception, language preference

III. Affective Subscale: Focuses on attitudes, appreciation & awareness

A. Recognition: recognize among different cultures, the impact of select elements on health care practices (socioeconomic, political, values, roles) & need to foster cultural care, & prevent ethnocentric views

B. Awareness of Cultural Gap: awareness, discomfort, interaction, insensitivity & prejudice

C. Self-Awareness: evaluation of student's own beliefs, biases & differences

D. Appreciation: own appreciation of cultural care, sensitivity, patient's world view, diversity, and roles

IV. New Factors: Added survey items obtained from PRIME program curriculum competencies list

A. Practice: Reflects actual practice of skills (translating, interviewing, use of interpreters

B. Definitions and Models: learning about cultural competence definitions and models

Figure 2: Medical Schools: Weighted Student hours per student by type of course: Main goal of course and required or elective course

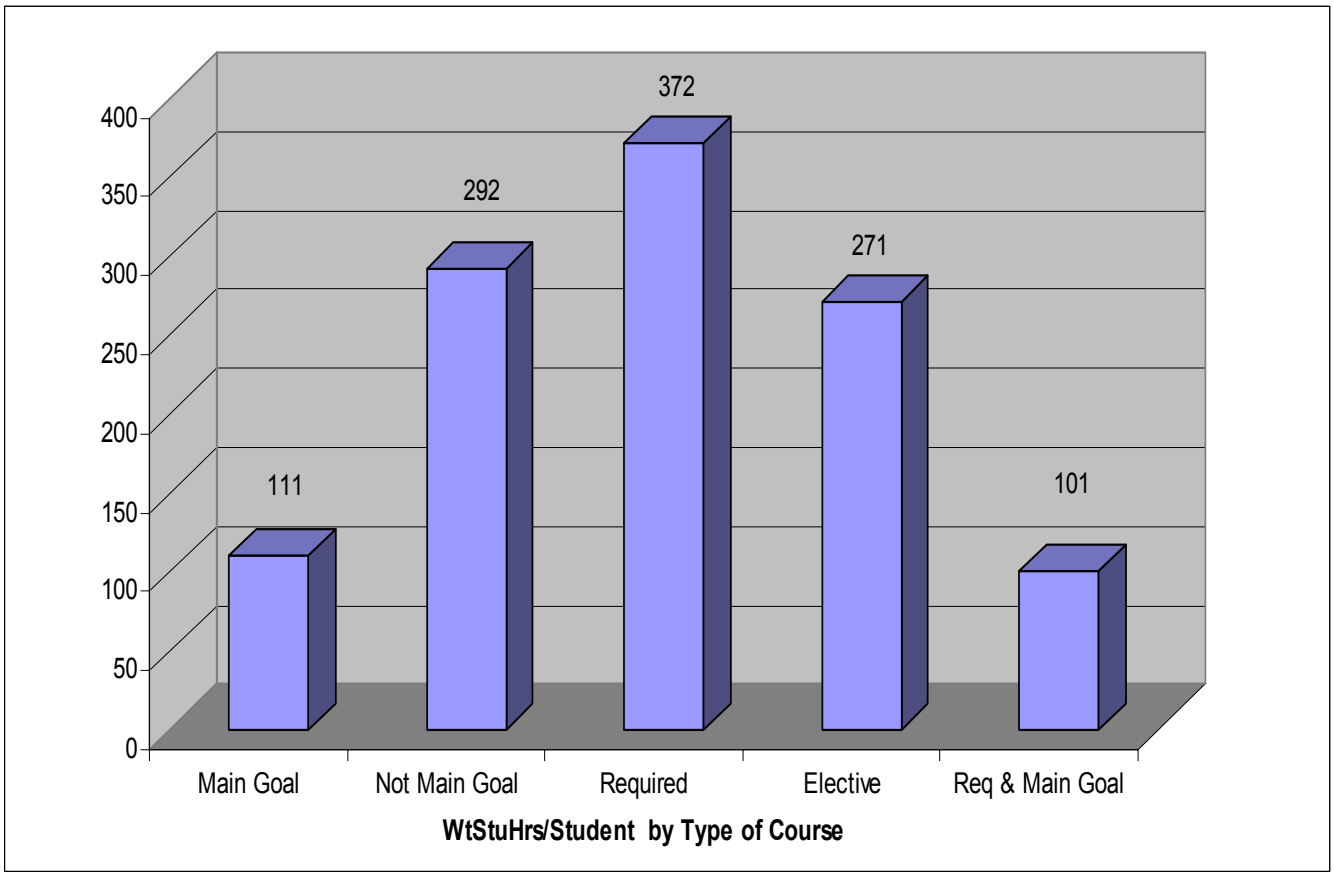


Figure 3: Medical and Dental Schools: Course Content Survey Scores for Main Subscales

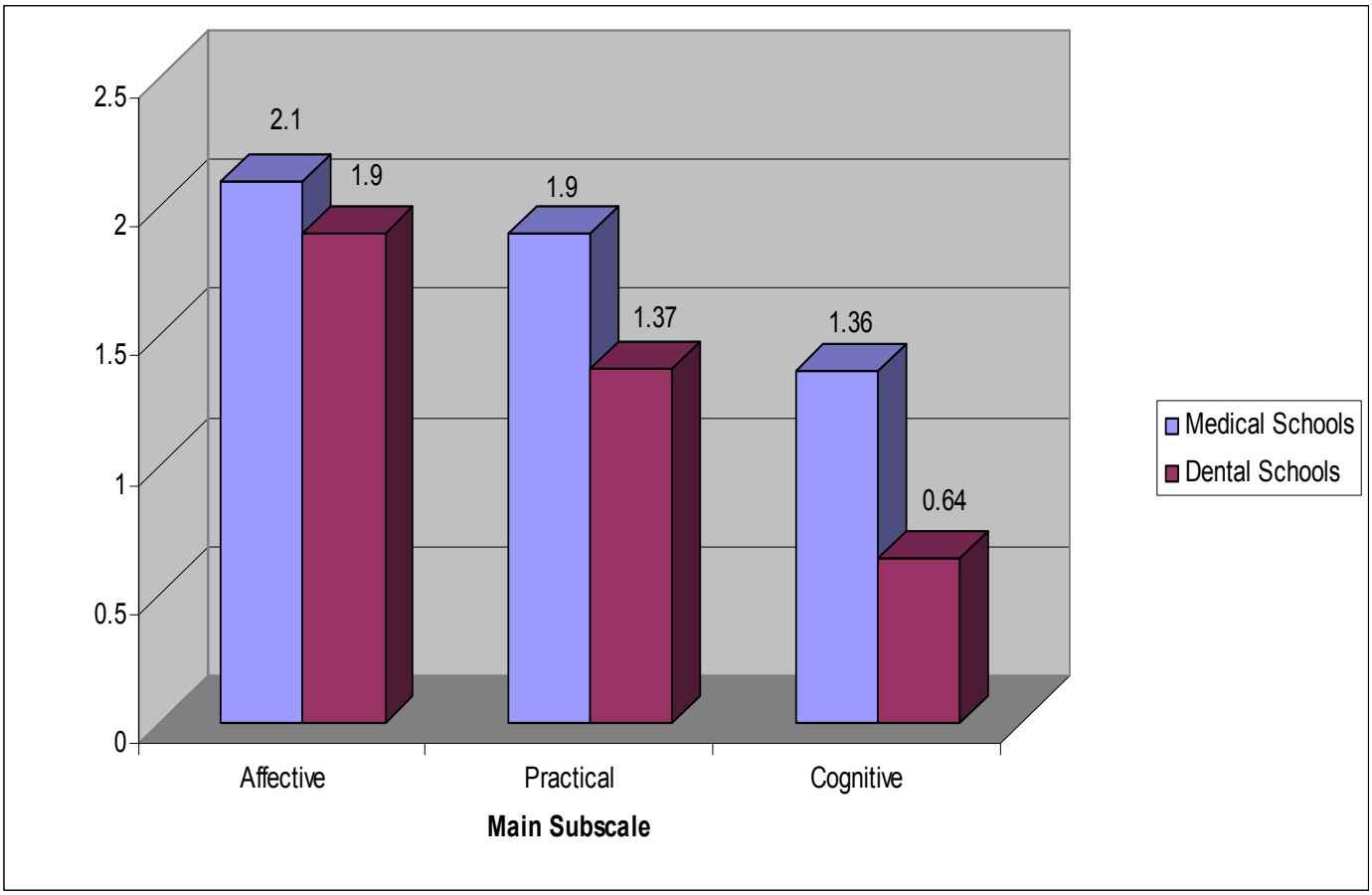
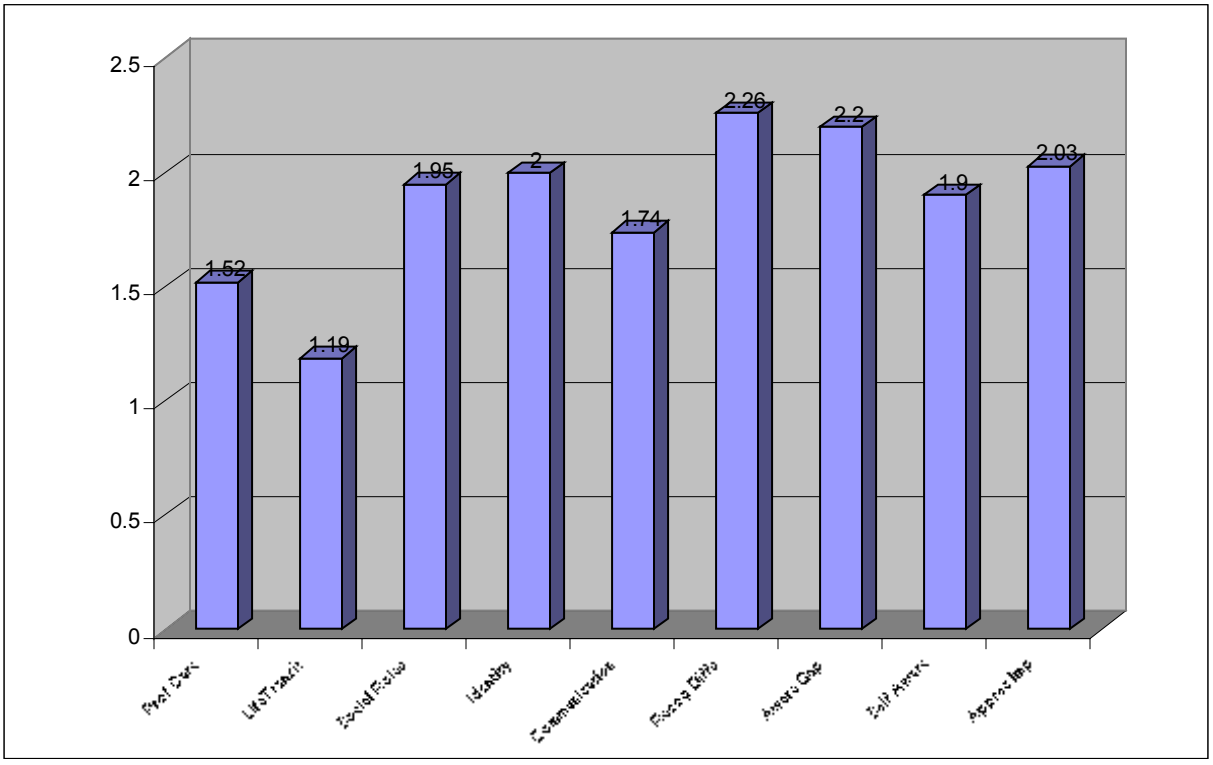


Figure 4: Medical Schools: Average Course Content Survey scores for the 11 Minor Subscales



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